

Docket No. F-7998

Ser. No. 10/705,629

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1-3. (Canceled)

4. (Previously Presented) An axial air-gap vibration motor, comprising:
an eccentric rotor comprising:

a printed wiring board having a first side and
an opposing second side;

a commutator disposed on a first side and air-
core armature connecting lands interconnected with
the commutator;

a bearing mounted [[in]] to the printed wiring
board at a center of rotation of the rotor;

a first air-core armature coil disposed [[on]]
at the second side of the printed wiring board;

a second air-core armature coil disposed at
the second side of the printed wiring board and

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overlapping the first air-core armature coil in an axial direction of the rotor and shifted in a first rotational direction relative to the first air-core armature in a range of $[[16^{\circ}]]$ 15° to 60°;

a third air-core armature coil disposed at the second side of the printed wiring board and so as to not overlap the first air-core armature coil and shifted in a second rotational direction, opposite said first rotational direction, relative to the first air-core armature at least about 120°, to not overlap said first and second air-core armature coils;

the first, second and third air-core armature coils being eccentrically disposed at the second side of the printed wiring board relative to the center of rotation of the rotor and interconnected with the air-core armature connecting lands; and

an eccentric weight disposed at the second side of the printed wiring board, eccentric with respect to the center of rotation of the rotor, and in a common radial plane with the second air-core

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armature coil and outside of said second air-core

armature coil;

a housing assembly including a casing and a bracket;

a shaft supported in the housing assembly and rotatably supporting said rotor via said bearing;

a magnet disposed in the housing assembly so as to define an axial air-gap in conjunction with the first, second and third air-core armature coils, and the first, second and third air-core armature coils having an angle section equal to a pitch angle of magnetization of the magnet; and

a brush disposed in the housing assembly engaging the commutator so as to supply current to the first, second and third air-core armature coils.

5. (Previously Presented) The axial air-gap vibration motor according to claim 4, wherein the first and third air-core armature coils are disposed in a second common radial plane.

6. (Previously Presented) The axial air-gap vibration motor according to claim 5, the bearing is a sintered oil-impregnated bearing.

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7. (Previously Presented) The axial air-gap vibration motor according to claim 6, wherein the casing has an step portion indented with respect to an outer surface of the casing, the shaft has a first end disposed in a hole in the step portion and welded to the casing from outside the housing assembly.

8. (Previously Presented) The axial air-gap vibration motor according to claim 7, wherein the bracket has a bracket hole and the shaft has a second end disposed in the bracket hole in the step portion and welded to the bracket from outside the housing assembly.

9. (Previously Presented) The axial air-gap vibration motor according to claim 4, the bearing is a sintered oil-impregnated bearing.

10. (Previously Presented) The axial air-gap vibration motor according to claim 9, wherein the casing has an step portion indented with respect to an outer surface of the casing, the shaft has a first end disposed in a hole in the step portion and welded to the casing from outside the housing assembly.

11. (Previously Presented) The axial air-gap vibration motor according to claim 10, wherein the bracket has a bracket hole and the shaft has a second end

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disposed in the bracket hole in the step portion and welded to the bracket from outside the housing assembly.

12. (Previously Presented) The axial air-gap vibration motor according to claim 4, wherein the casing has an step portion indented with respect to an outer surface of the casing, the shaft has a first end disposed in a hole in the step portion and welded to the casing from outside the housing assembly.

13. (Previously Presented) The axial air-gap vibration motor according to claim 12, wherein the bracket has a bracket hole and the shaft has a second end disposed in the bracket hole in the step portion and welded to the bracket from outside the housing assembly.

14. (Previously Presented) The axial air-gap vibration motor according to claim 5, wherein the eccentric weight overlaps the first and third air-core armature coils in the axial direction of the rotor.

15. (Previously Presented) The axial air-gap vibration motor according to claim 4, wherein the eccentric weight overlaps the first and third air-core armature coils in the axial direction of the rotor.